

WHAT IS CLAIMED IS:

1. A calcium tartrate composition comprising particles having a mean particle size less than about 30  $\mu\text{m}$ .

2. The composition according to claim 1, wherein the mean particle size is less than about 25  $\mu\text{m}$ .

3. The composition according to claim 1, wherein the mean particle size is less than about 20  $\mu\text{m}$ .

4. The composition according to claim 1, wherein the mean particle size is less than about 18  $\mu\text{m}$ .

5. The composition according to claim 1, wherein the mean particle size is less than about 15  $\mu\text{m}$ .

6. The composition of claim 1, wherein less than 5% of particles have a particle size greater than about 40  $\mu\text{m}$ .

7. The composition of claim 6, wherein less than 1% of particles have a particle size greater than about 40  $\mu\text{m}$ .

8. The composition of claim 6, wherein less than 0.1% of particles have a particle size greater than about 40  $\mu\text{m}$ .

9. A method for preparing a calcium tartrate composition comprising particles having a mean particle size less than about 30  $\mu\text{m}$ , comprising the following steps:

submitting maleic acid to an enzymatic catalytic epoxidation thereby obtaining cis-epoxysuccinate,

submitting said cis-epoxysuccinate to the action of an epoxide hydrolase thereby producing L-tartaric acid;

precipitating said L-tartaric acid with  $\text{CaCl}_2$  thereby obtaining calcium tartrate crystals; and

recovering the calcium tartrate crystals to obtain a calcium tartrate composition.

10. The method of claim 9, wherein said L-tartaric acid is precipitated by adding an equimolar amount of  $\text{CaCl}_2$ .

11. The method of claim 9 further comprising drying and grinding said recovered calcium tartrate crystals.

12. A plaster composition comprising the composition of claim 1.

13. A powder comprising the composition of claim 1, wherein the powder is selected from the group consisting of cement, mortar, and concrete.

5 14. A method for preparing a calcium tartrate composition comprising particles having a mean particle size less than about 18  $\mu\text{m}$ , comprising the following steps:

submitting maleic acid to an enzymatic catalytic epoxidation thereby obtaining cis-epoxysuccinate,

10 submitting said cis-epoxysuccinate to the action of an epoxide hydrolase thereby producing L-tartaric acid;

precipitating said L-tartaric acid with  $\text{CaCl}_2$  thereby obtaining calcium tartrate crystals; and

recovering the calcium tartrate crystals to obtain a calcium tartrate composition.

15 15. The method of claim 14, wherein said L-tartaric acid is precipitated by adding an equimolar amount of  $\text{CaCl}_2$ .

16. The method of claim 14 further comprising drying and grinding said recovered calcium tartrate crystals.

17. A plaster composition comprising the composition of claim 4.

20 18. A powder comprising the composition of claim 4, wherein the powder is selected from the group consisting of cement, mortar, and concrete.